

FCC 17-108 Reply Comments by Harold Hallikainen

I did not have time to review the more than 20,000,000 comments filed. I will address a few of the substantive comments and make a couple additional comments.

Comment Authenticity

It has been suggested that not all comments filed in the proceeding are authentic (filed by the person under whose name the comments were filed). The Commission could mail a postcard to each commenter at the specified address asking that they authenticate their comments by going to a web site and keying in a code from the postcard. While postage on 20,000,000 postcards is substantial, it appears less than the cost of staff time required to determine the authenticity of the comments.

What's in a Name?

Some commenters supporting the repeal of title 2 regulation claim that they are not providing telecommunications but, are instead, providing an "information service." However the none of the commenters have "information service" in their names. Instead, they have "communications" or "telecommunications" in their names. Examples include:

- **Verizon Communications** - "Verizon is a global leader delivering innovative communications and technology solutions that improve the way our customers live, work and play." (see <http://www.verizon.com/about/our-company>). Verizon does offer non-telecommunications services such as AOL, Edgecast content delivery, but these are separable from the telecommunications services currently subject to title 2 regulation.
- **NCTA The Internet and Television Association** - This organization was originally the National Cable Television Association, then the National Cable and *Telecommunications* Association. It appears to be a group of telecommunications companies attempting to escape regulation as telecommunications companies.
- **US Telecom** - The name says it all. "USTelecom is proud of our extremely diverse member base, which ranges from the nation's largest telecom companies to small rural cooperatives." (see <https://www.ustelecom.org/who-we-are/membership>).
- **Frontier Communications Corporation** - "Frontier Communications Corporation (NASDAQ: FTR) is a leading provider of data, video and voice services to commercial and consumer customers in [29 states](#)." (see <https://frontier.com/corporate/about-us/overview>)

1930s Style Regulation

Several commenters denounce “1930s utility-style regulation” (for example, comment ID 107171074518088 by Frontier Communications Corporation, at <https://ecfsapi.fcc.gov/file/107171074518088/Comments%20-%20Net%20Neutrality%2007.17.17.pdf>). The term “common carrier” has been in use since about 1670. In 1857, a common carrier was defined as “To render the master and owners of a ship liable as common carriers, it must appear that the ship is a general ship, or employed for the carriage of goods for all persons indiscriminately, who offer goods for carriage to the place of destination, such as vessels employed in the coasting trade or in a foreign trade.” The Interstate Commerce Act of 1887 applied common carrier regulation to railroads. In 1910, the Mann-Elkins act applied common carrier regulation to telephone and telegraph reasoning “the carriage of electronic intelligence should be regulated in the same manner as the carriage of goods and passengers.” The common carrier concept was carried over to the Communications Act of 1934 and the Telecommunications Act of 1996. Though an old concept, “common carrier” still applies today in shipping, transportation, and telecommunications. Unfortunately, the Communications Act of 1934, as amended, uses a circular definition of common carrier as “... any person engaged as a common carrier for hire...” For a more clear definition, we can go to *US Telecom Association v Federal Communications Commission* (295 F.3d 1326) where the court accepted the FCC’s test of whether one qualifies as a common carrier. Under that test, common carrier status turns on: (1) whether the carrier “holds himself out to serve indifferently all potential users”; and (2) whether the carrier allows “customers to transmit intelligence of their own design and choosing.” This is precisely what a Broadband Internet Access Service provider provides and what the public expects that service provider to provide. Even though “common carrier” is an old idea, it’s a good idea.

Similar Services Should Be Treated in a Similar Way

As discussed in my original comments, the Internet and Plain Old Telephone Service are both telecommunications services with many similarities. The main difference is that POTS uses circuit switched technology, while the Internet uses packet switching. POTS generally carries voice while the Internet carries a wide variety of data. POTS is also capable of carrying a wide variety of data, though at lower speeds due to the circuit bandwidth. Both POTS and broadband Internet access providers serve large portions of the general public (“holds himself out to serve indifferently all potential users”) and transmit user supplied information from one place (phone number or IP address) to another (allows “customers to transmit intelligence of their own design and choosing.”). Commenters in favor of removing broadband Internet access providers from title 2 regulation fail to explain why these two telecommunications services (POTS and Internet) should be treated in different ways. I suggest that all communications common carriers be regulated the same (under title 2) and, if these rules are onerous, they should be revised as necessary while still protecting the public.

Edge Providers

Commenters argue that current regulations (under title 2) benefit edge providers at the expense of broadband Internet access providers. Of course, the Federal *Communications* Commission regulates communications and not content providers. It is generally the content provided by these edge providers that is creating demand for the communications services offered by broadband Internet access providers. Without this content, broadband Internet access providers would have far fewer customers and the revenue they produce. However, it does make sense that those who put traffic on the network should pay for its delivery. I suspect edge providers are already paying for “fat pipe” connections to broadband Internet access provider networks or to networks peered with those networks. In addition, individual subscribers are paying for delivery of data they request from edge providers (such as Netflix). These “fat pipe” and peering arrangements should be nondiscriminatory.

Zero Rating

While I disagree with AT&T’s conclusion that title 2 regulation is not required, I do agree that zero-rating can be acceptable. I see zero-rating as equivalent to toll free telephone numbers on POTS. We have found 800 numbers to be acceptable in POTS. If BIAS providers offer zero-rating on a nondiscriminatory basis, including charging the same price to its affiliated and unaffiliated content providers, it should be allowed.

Prioritization

While I disagree with AT&T’s conclusion that title 2 regulation is not required, I do agree that packet prioritization is necessary for efficient network usage. The endpoint originating the packet can use the Type of Service field to indicate whether latency, throughput, or other requirements are the primary concern. They can also indicate an overall packet priority. BIAS providers could offer different prices for different packet priorities. These might be unlimited traffic for the lowest priority and increasing price per bit for higher priorities. Client/server systems would negotiate the lowest priority required for the application to operate properly over the network on a packet by packet basis. BIAS providers should make priority decisions based on subscriber indications in the ToS field instead of arbitrarily limiting the bandwidth available for a particular type of content based on the BIAS provider’s interpretation of what the content is and how much bandwidth it needs.

Conclusion

Due to the limited time, I only had a chance to review a few of the 20,000,000 comments filed in this proceeding. I still believe that broadband Internet access service is a telecommunications

common carrier service and should be regulated as such. There are many parallels to "Plain Old Telephone Service," and these parallels should be used as guidance in BIAS regulation. For example, zero-rating is equivalent to toll free numbers. It should be permitted on a non-discriminatory basis. Prioritization is similar to varying telephone rates between peak and nonpeak periods. Users should be able to choose the priority of their IP packets with known pricing for each priority level. Similar services should be treated in a similar way.

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